

# NASA Announces Major Reorganization

Dr. James C. Fletcher, NASA Administrator, and Dr. George M. Low, Deputy Administrator, recently announced a reorganization of NASA Headquarters and named several senior officials to fill key positions in the new organization. The changes and appointments become effective March 15.

Dr. Rocco Petrone has been named Associate Administrator, replacing Dr. Homer E. Newell, who has retired. As Associate Administrator, Dr. Petrone will be responsible for the overall management of the Agency's research and development programs. He will direct the activities of the Headquarters program offices, including Manned Space Flight, Space Science, Applications, Aeronautics and Space Technology, and Tracking and Data Acquisition. These offices previously reported to the Administrator.

Dr. Petrone is currently Director of the Marshall Space Flight Center, Huntsville, Ala., and prior to that served as Apollo Program Director at NASA Headquarters. In addition to his duties as Associate Administrator, he will continue to serve as Director of MSFC until early summer to oversee organization and personnel changes now underway at that installation.

Dr. John Naugle has been named Deputy Associate Administrator. Dr. Naugle is presently the Associate Administrator for Space Science, and will also continue acting in that role until a successor is named.

NASA also announced the creation of a new post: the Associate Administrator for Center Operations, who will be responsible for Agency-wide planning and direction of resources and activities at the NASA field installations. The directors of the ten major NASA field installations will report to the Associate Administrator for Center Operations. These installations are JSC; Ames Research Center,

Moffett Field, Calif.; Flight Research Center, Edwards, Calif.; Goddard Space Flight Center, Greenbelt, Md.; Jet Propulsion Laboratory, contractor-operated facility in Pasadena, Calif.; Kennedy Space Center, Fla.; Langley Research Center, Hampton, Va.; Lewis Research Center, Cleveland, Ohio; Marshall Space Flight Center, Huntsville, Ala.; and Wallops Station, Va. Prior to the change, these installations reported to the designated Headquarters institutional directors.

Dr. George M. Low, NASA Deputy Administrator, will serve as Acting Associate Administrator for Center Operations until a permanent appointment has been made. Edwin C. Kilgore, Deputy Associate Administrator for Aeronautics and Space Technology (Management), will assist Dr. Low in the new office on a full-time basis during the interim period.

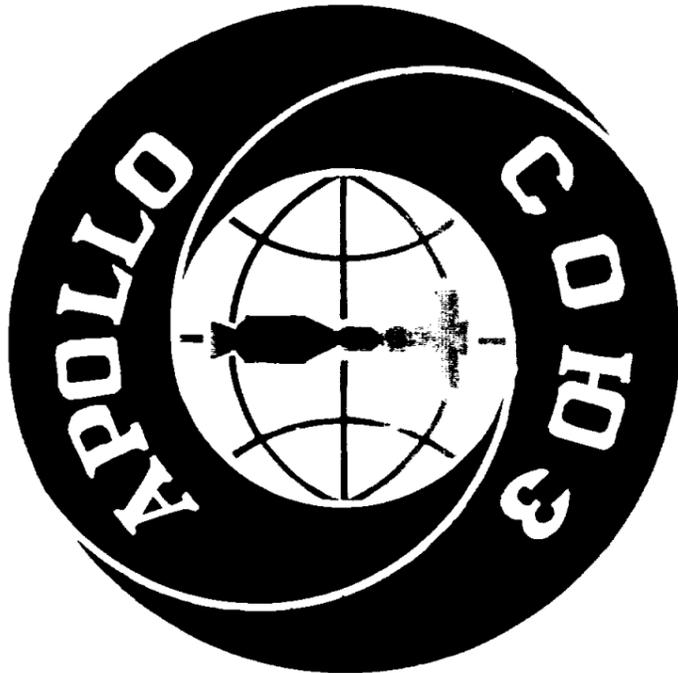
Dr. Fletcher said the changes were made as a result of the completion of the Apollo and Skylab Programs, and the transi-

tion to the space programs for the remainder of the 1970's and into the 1980's. The new Organization will provide the needed mechanisms for the phaseover from conventional launch vehicles to the Space Shuttle, and to the payloads which will make use of the Shuttle. At the same time, the new organization will provide for a more dynamic interaction with NASA's field Centers, and thereby with NASA's people—the engineers, scientists and managers who are the key to NASA's success.

Both the Associate Administrator and the Associate Administrator for Center Operations will report to the Administrator.

Also announced effective March 15 were the appointments of Bernard Moritz as Associate Administrator for Organization and Management and Gen. Bruce Holloway as Acting Associate Administrator for Aeronautics and Space Technology. Gen. Holloway will also continue to serve in his present position of Assistant Administrator for DOD

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## ASTP Emblem Selected

The Soviet Academy of Sciences and NASA have selected the official emblem of the joint U.S./USSR space mission.

Of circular design, the emblem has the words Apollo in English and Soyuz in Russian around a center disc which depicts the two spacecraft docked together in Earth orbit.

The Apollo/Soyuz Test Project

will be carried out by a Soviet Soyuz spacecraft and a U.S. Apollo spacecraft which will rendezvous and dock in orbit.

Soyuz and Apollo will remain docked for as long as two days in which period, the three Apollo astronauts will enter Soyuz and the two Soyuz cosmonauts will visit Apollo via a docking module.

## National Space Club Holds Contest

The National Space Club has announced the opening of the Robert H. Goddard Historical Essay Award competition for 1974. This annual nationwide competition, with a \$500 prize, is open to any U.S. citizen.

The contest is named in honor of the world rocket pioneer, Dr. Robert H. Goddard, whose sci-

entific and technological contributions—although belatedly recognized in the United States—helped open the door to space.

Essays may concern any significant aspect of the historical development of rocketry and astronautics and will be judged on their originality and scholarship.

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Senator Hartke Visits JSC—Senator Vance Hartke, left, D-Indiana recently visited the Center. Astronaut Joseph Allen, right, explains MOCR operations to the Senator during his tour of JSC facilities.

# ROUNDUP

NASA LYNDON B. JOHNSON SPACE CENTER

HOUSTON, TEXAS



Vol. 13 No. 8

March 15, 1974

## 10c Skylab Stamp To Be Issued Soon

Design of a stamp to commemorate the Skylab Program has been announced by the U.S. Postal Service. The 10 cent stamp will be issued May 14, 1974, the anniversary of the Skylab I launch.

The stamp was designed by Robert T. McCall of Paradise Valley, Arizona. It was modeled by V. Jack Ruther and engraved by Joseph S. Creamer and Albert Saavedra, all of the Bureau of Engraving and Printing.

The stamp will be printed in yellow, red, blue and black.

First day cancellation requests may be sent to "Skylab Stamp, Postmaster, Houston, Tx. 77013. Proper remittance must be enclosed and the request must be postmarked no later than May 14.

## NASA Adopts New Safety Program

NASA Administrator Dr. James C. Fletcher has adopted the "Safety '76" program for the Agency for the next three years, as part of the Federal Government's interest in safety and health for its employees.

"I would like to see all NASA organizations support this program fully and improve our safety posture." Fletcher stated, "Our disabling injury trend for

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## Lunar Science Conference Begins Mon.

The Fifth Annual Lunar Science Conference will be held at JSC March 18 through 22, and will be attended by more than 500 lunar and planetary scientists and principal investigators of Apollo lunar samples.

Opening ceremonies will be on Monday with Dr. Christopher C. Kraft, Jr., JSC Director and Anthony J. Calio, Director of Science and Applications. More than 190 individual papers will be presented during the conference at three concurrent sessions. More than 380 papers were submitted. Abstracts of these papers will be available at the conference.

This year's conference will be dedicated to the late Dr. Paul W. Gast, one of the nation's leading experts in the field of lunar geochemistry, who died in May 1973.

Dr. Gast was chief of the NA-

SA Johnson Space Center Planetary and Earth Sciences Division and was well known in the field of mass spectrometry and rare earth analysis on terrestrial and extraterrestrial samples. He was responsible for supervising the analysis of lunar samples returned from the Moon in the Apollo missions, as well as taking part in planning the lunar landing missions. He died of cancer in a Houston hospital and is survived by his wife, two sons and a daughter.

The Fifth Annual Lunar Science Conference will direct itself to six main topics, covering all papers. The topics are: constraints on structure and composition of the lunar interior; characteristics and movement of materials in the lunar regolith; characterization and evolution of the mare basins; characteriza-

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SAFETY '76—NASA Administrator Dr. James C. Fletcher signs the "Safety '76 program proposal. Looking on is George C. White, NASA Director of Safety and Reliability and Quality Assurance.

## NASA Adopts New Safety Program

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the last four years has been gradually rising. I call upon each NASA employee to help reverse this trend."

The "Safety '76" program will be a continuation of efforts to improve conditions for the 2.6 million Federal employees be-

gun in 1965. The two previous programs, "Mission Safety—'70" and "Zero-in," resulted in an estimated saving to taxpayers of nearly \$40 million as well as incalculable human benefits by reducing work-place injuries.

JSC Deputy Director, Sigurd

A. Sjoberg introduced the new Federal Safety Program at a recent meeting of Center Safety Representatives.

"The Director has established the goal of a 50 percent reduction, both in the total number of accidents and in the total of lost-time accidents that we experienced in 1973," Sjoberg related.

Federal employees at JSC experienced a total of 241 accidental injuries during 1973; 20 of these were lost-time accidents.

The new federal program will continue through our Nation's bi-centennial year, 1976.

## JSC Awards Contract to Pan American

Pan American World Airways, Inc., Aerospace Services Division, Cocoa Beach, Florida has been awarded a contract for plant maintenance and operations support services at JSC.

Pan American will be responsible for the operation of all

utility systems and maintenance of utilities, buildings, roads, ditches, and special equipment at JSC.

The contract will be a cost-plus-fixed-fee/award fee type contract and is awarded for a one-year period.

## Vice President Ford Praises Civil Service

*I am convinced that one of the best ideas the people of America have ever expressed, and one of the best acts ever to come out of the Congress, was the creation of a career civil service back in 1883.*

*It is unfortunate that the term "civil service" often conjures up the very opposite of what I am talking about, for in this enlightened world there are some who still equate civil service with security and routine.*

*To me, civil service has a much higher meaning.*

*It is a work environment for which top notch people are selected on the basis of ability. A place where the product of one's hands is more important than the color of one's hands. A place where the work itself takes precedence over the sex of the person doing it. A place where service to the people transcends party labels. A place where the word "service" means exactly what it says.*

*To me, an old Navy veteran, civil service also means a taut ship steaming on a steady course. Whatever squalls and heavy swells may come, the ship rides steady and true.*

*When the Nation was confronted with the energy crisis, a new Government agency had to be created almost overnight. Drawing on the expertise and competence already available in the civil service, the Federal Energy Office was in business within two weeks...*

*More than a decade ago, the United States was challenged to put a man on the moon before 1970—a task that strained science and technology to their outermost limits. It was done through a productive joint effort of Government and industry...and one of the men in charge, Robert Gilruth, had this to say: "Nowhere but in the Federal service could we have found the quality and quantity of talent required to carry out a mission of this size."*

*To me civil service means tremendous knowledge and a great depth of understanding on the part of career people who have devoted their lives to government. You can take almost any type of legislation that comes before the Congress, and I can give you an example of how the knowledge of career people has provided information that made a given bill an even better law.*

*To me, from my new vantage point in the Executive branch of government, civil service means a solid foundation of competence assuring that the mandate the voters have given the political leadership will be carried out.*

*These are some pretty generous words I have been using to portray and praise the civil service: competence...steadfastness...knowledge...dependability...responsiveness. Yet*

*Yet each one is deliberately chosen, and equally well deserved...*

*...There is awareness, on the part of the two and a half million men and women who comprise the civil service, that the service exists to carry out the programs that people expect of their national government. That, in the final sense, is what government in a democracy is all about.*

## Space Club Contest

(Continued From Page 1)

They may bring new information to light or may cast a new and different light upon events or individuals influencing rocketry and astronautics in the United States.

Entries should be submitted by November 1, 1974 to the Goddard Historical Essay Contest, c/o National Space Club, 1629 K. Street, N.W., Washington D.C. 20006. The winner, who will be announced at the Awards Ceremony in early 1975, will receive the Goddard Historical Essay Trophy, Certificate and a \$500 prize.

The Robert H. Goddard Historical Essay Award was the first literary competition devoted to historical affairs in the field of rocketry and astronautics.

The NSC's Committee for the History of Rocketry and Astronautics, whose members serve as judges for the contest are Dr. Eugene M. Emme, Chairman, NASA Historian; Dr. Thomas Belden, the USAF Historian; Frederick C. Durante, III, Assistant Director, National Air and Space Museum, Smithsonian Institution; Dr. Paul A. Garber, Curator, National Air and Space Museum, Smithsonian Institution; James M. Grimwood, Historian, JSC; Professor Melvin Kranzberg of the Georgia Institute of Technology; and Dr. Charles S. Sheldon, II, Legislative Reference, Library of Congress.

The purpose of this committee is to promote, encourage and stimulate the documentation, analysis, and publication of the history of rocketry and astronautics, bringing to light the scientific, technological, organizational, and human aspects of signifi-

cant developments and their impact upon society.

## WSTF Secretary Receives Award

Carol E. Irby, employed in JSC's Laboratories Office, White Sands Test Facility, New Mexico, has been named "Outstanding Secretary" for March.

One of the most important functions of the Laboratories Office is to perform lab tests for other NASA agencies including Marshall Space Flight Center, Kennedy Space Center and Langley Research Center. Carol has established excellent rapport with personnel from these Centers and has continually provided them with mail service, telephone calls, datafax communications, travel arrangements, special office supplies and other such tasks.

In addition, Carol has become familiar with technical language used by engineering and scientific personnel and is able to effectively relay technical information. Her secretarial work is precise, neat and rapidly performed.

Carol's cooperative attitude and her desire to perform more than defined duties takes a significant amount of routine work from the professional lab personnel, increasing efficiency by allowing them to concentrate on the technical aspects of their tasks.

Carol is highly motivated, seeks continually for self improvement and requires a minimum of supervision. As a result she has become a valuable member of the Laboratories Office Team.



OUTSTANDING SECRETARY—Carol E. Irby has received the JSC Outstanding Secretary Award for March. She is secretary to David L. Pippin, Chief of the Laboratories Test office, White Sands Test Facility, Jesse C. Jones, Manager, WSTF presented Carol with a plaque and a check for \$100.

## ROUNDUP

NASA LYNDON B. JOHNSON SPACE CENTER

HOUSTON TEXAS



The Roundup is an official publication of the National Aeronautics and Space Administration Lyndon B. Johnson Space Center, Houston, Texas, and is published every other Friday by the Public Affairs Office for JSC employees.  
Editor: Janet Wrather      Photographer: A. "Pat" Patnesky



**SPACE BLANKET**—JSC employee Hal Hunt uses a space blanket to shield panels in his Building 2 office from heat radiated from the Sun. The blanket is made of material similar to that used for the Skylab parasol and reduces the heat considerably.

## Dr. Wright Discusses Dangers of Hepatitis

(The following article by Dr. Paul E. Wright, JSC M.D., is the second in a series of articles on Health Care.)

### What is Hepatitis?

Hepatitis is the most common infection of the liver. There were 59,431 reported cases in the United States in 1970, for a rate of about 30 cases per year per 100,000 population. The trend in reported case rates, which had been downward from 1961 to 1965, has been upward since 1966. There are two major types of hepatitis—infectious hepatitis and serum hepatitis.

### How Do You Get Hepatitis?

Infectious hepatitis is transferred by the intestinal-oral route and becomes a major health problem in crowded conditions such as military bases, summer camps—any time people are living in close quarters. The usual incubation period is two to six weeks and the virus is present in the feces and blood in the early stages of the disease. Once a patient has recovered from hepatitis, he can never give blood because the virus is always present and the contaminated blood could transmit the disease to an innocent patient. The virus can be present in water and foods such as mild or raw oysters. Some may recall when Holy Cross College had to cancel its football schedule when most of the team came down with hepatitis after they drank infected water.

In 1963, 424 people in Czechoslovakia developed hepatitis when they drank contaminated milk. The doctors discovered that the virus came from the contents of a septic tank used to fertilize the fields of a dairy farm. Grass-to cows-to milk-to people. If water is already contaminated with the hepatitis virus, raw oysters will concentrate the virus in their bodies. Health authorities are keeping an eye out for contaminated foods, water, or milk.

Serum hepatitis can be transferred by infected blood. That is why people are turned down by

the Red Cross if they indicate a history of "jaundice" or hepatitis. Unfortunately, some commercial blood banks will take blood from any donor, including narcotic addicts or "Bowery residents," who are much more likely to have infected blood. In recent years, for example, serum hepatitis has been spread by narcotic addicts who use the same unsterilized needles and syringes. Authorities carefully watch this blood source. Recently, a special test was developed to eliminate blood that is contaminated.

The hepatitis virus is very difficult to destroy. Physicians and nurses sterilize their instruments with an autoclave, which has a very high temperature for 20 minutes. Company medical departments are equipped with disposable needles which are used only once and then disposed of with special care.

### Treatment And Prevention

The immediate family of someone who contracts hepatitis can obtain temporary protection by receiving human immune globulin injections. Bed rest is important in the acute stages of the disease until all tests indicate a return to normalcy. Children and young adults usually recover faster and have milder attacks than older people.

It is important to avoid alcohol in any form for several months after recovery. In chronic, recurrent hepatitis, it is wise to avoid alcohol forever because such patients can develop cirrhosis of the liver.

Much research is being done, and the scientists are trying to perfect a vaccine that will prevent hepatitis the way polio has been prevented. The hepatitis virus is very small and difficult to identify even with the use of an electron microscope or special tests using blood serum. Doctors are confident that this common and serious disease will eventually be brought under control.

## Roundup Swap-Shop

Swap Shop advertising is available to JSC and on-site contractor personnel. Articles or services must be offered as advertised, without regard to race, religion, sex or national origin. Ads should be 20 words or less, including home telephone number. Name and office code must accompany, but need not be included in ad copy. Typed or printed copy must be received (AP3 Attn: Roundup) by Thursday of the week before publication.

### MISCELLANEOUS

Stainless flatware service for 6, handsome design, still in orig wrappings, \$11.50, wiglet, light red-brown human hair, \$4.50, 332-1375. 2 handsome folding tables, blond tops, blc legs, \$6. Limoges platter, 12 plates (3 sizes), assorted textbooks and music, 10 cents up, wardrobe trunk, bst ofr. 332-1375.

Complete Heath amateur station, mint cndn, guaranteed, SB301 w/ C.W. filter, S401 w/ \$125 speech processor, matching speaker, microphone, Lindsey, 488-0517.

12 horsepower OB motor, Sea King w/ 6 gal tank, gd cndn, \$125, 944-2072 aft 5 pm or x-4464, R. Laird.

Baby grand piano, vose, blc mahogany, \$600, 488-4463.

Ham gear, SB102, TR-4, TR-3, dozens of other goodies, all clean, Lindsey, 488-0517.

Sears diaphragm type air compressor w/ hose and spray gun, \$25, Rogers, x-3576 or 944-7042.

Ski boots, ladies sz 7, Henke's Plastic, used once, 334-5160.

Dark room equipment incl Omega enlarger, li nw cndn, orig cost \$800, will take \$395, Eddie or Billie 946-3995.

Sears bed wetting alarm battery operated, \$40+, nds batteries, \$20, Underhill, 482-3100 aft 4:30.

Phantom Trolling motor, 2 spd, \$20, 946-7587.

Custom garden tilling in CL area, reasonable, 488-2652.

Encyclopedia Britannica, 73 edition, xint cndn, \$300, 487-1247.

Polaroid square shooter camera li nw, \$15, LeRah, x-4581 or 925-2412.

Dry storage stalls, 10x26 to 12x32, \$15 to \$20, free wash facilities, solid partitions, lights and outlets, 6' chain link fence, 332-2292, 332-2291.

Jayco hdtpr folddown camper for rent, kitchen, ice box, sleeps 8, low profile, pulls easily, \$10/day, \$57/wk (\$25 min.) Kilbourn, 482-7879 or 483-4801.

14" chrome wheels, fit Dart or Duster, locks included, 2 or 3 wheels, make ofr, 488-5192, Lauster.

AKAI x7 stereo reel tape recorder, 3 spds, (7 1/2, 3 3/4, 1 7/8), auto shut-off extras, used very little, \$175, 488-5192.

Umco W650 plastic worm box, \$6 (new, \$9) xint, 471-3314.

Black and Decker twin rotor electric mower, li nw, \$50, Jones, x-2823 or 538-1655.

### VEHICLES

VW Dunebuggy, 12 V electrical system, 58 hp engine, prfct cndn, for street and off road use, \$750, Peacock, 332-2292.

66 Comet, 289, 4-dr, auto trans, air, radio, \$475, La Marque, 935-2948.

72 Honda, Fairing, lug rack, sissy bar, xint cndn, \$600, John, x-3274 or 534-4338.

53 Chevy 210, 2-dr standard trans, xint body, runs gd, 4 nw wh wall tires, nds upholstery, 17MPG in town, \$695, Underhill, 482-3100 aft 4:30.

Chev. 57, Bel Air, auto, air, 79,000 mi, body work required, bst ofr, 333-2271 aft 7 p.m.

71 SL-350 Honda electric start \$600, 3 bike motorcycle trailer w/ straps, 74 licensr plates, \$125, 482-2723.

70 Plymouth Duster, mint cndn, air, pwr str, auto, 20 mpg, lw mi Alford, 334 -2844.

## EAA Attractions . . .

### Astroworld

Friday, April 19 is NASA Night at Astroworld. The EAA has reserved the entire park from 7:30 p.m. to midnight for NASA families and their friends.

Tickets are available at the Building 11 cafeteria and from EAA representatives.

### Six Flags

Six Flags Over Texas is offering discount tickets to JSC employees and contractors for the 1974 season which begins March 15 and closes December 1. Six Flags is just off the Turnpike between Dallas and Ft. Worth. KThe recreation area offers good family entertainment with almost 100 rides, shows and other attractions.

Tickets are on sale at the Building 11 cafeteria. Prices are \$5.60 for adults (regular \$6.50) and \$4.70 for children under 12 (regular \$5.50).

### Easter Egg Hunt

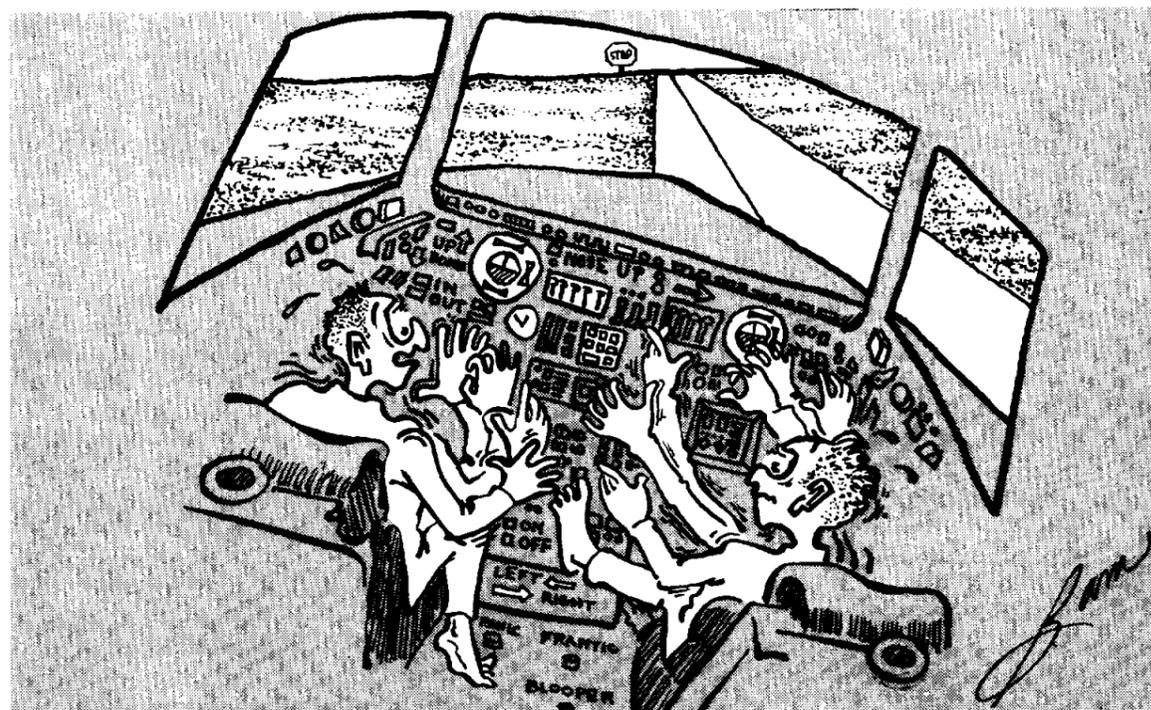
The annual easter Egg Hunt is scheduled for April 6 at the Gilruth Recreation Facility area. Children ages 2-8 may participate.

Each child will be given an Easter egg basket; it is not necessary to bring one. Following the hunt, packages of Easter Egg candy and goodies will be distributed. In case of rain, the candy and eggs will be distributed between 1:00 and 2:00 at the Gilruth Building.

Tickets at 50 cents each are available at the Building 11 cafeteria.

## Take stock in America.

Buy U. S. Savings Bonds



"WHO SAID WE COULDN'T FLY THE SHUTTLE MANUALLY!!!"

## Lunar Science Conference Begins Monday (Continued From Page 1)

tion and evolution of the lunar crust; nature of impact processes and their effects on lunar materials; and the exchange of material and energy between the moon and its environment.

Concurrent sessions will be held in the Building 1 Auditorium, and at the Gilruth Recreation Center, JSC. Sessions begin at 8:30 a.m. on each of the session days. At 2:00 p.m. Thursday, a general session will be held in the auditorium. The general session will address itself to a number of papers broadly detailing the recent advances in a number of fields. On Thursday evening, a special Skylab review program

will be presented in the auditorium and will feature Dr. Owen Garriott, science pilot for the second Skylab mission and Dr. William Lenoir, scientist astronaut. Dr. Garriott will give a Skylab overview with emphasis on solar observations and medical research, and Dr. Lenoir will give a briefing on earth resources in visual observations from Skylab.

On Friday, summary sessions will be held for each of the six topic areas. One scientist per topic will be responsible for following his area throughout the entire week and presenting an overview at Friday's session.

The program committee for this year's lunar conference consists of Dr. Larry Haskin, co-chairman and Chief of the Planetary and Earth Sciences Division at JSC; Dr. J.W. Head, co-chairman and acting head of the Lunar Science Institute; Dr. D.S. Burnett, Division of Geology and Planetary Sciences, California Institute of Technology; W. Gose, staff scientist at the Lunar Science Institute; Dr. William C. Phinney, Chief of the Geology Branch of the Planetary and Earth Sciences Division, JSC; J. Pomeroy of NASA Headquarters and Dr. D. Strangway, University of Toronto.

## Mariner 10 To Observe Sun's Effect on Mercury

The powerful solar forces bombarding Mercury, the tiny planet closest to the Sun, will soon be observed for the first time close-up by a battery of Mariner 10 scientific instruments.

Engulfed by the strongest solar wind yet measured by man, Mercury promises a fertile target for four Mariner experiments—measurement of solar plasma, charges particles, magnetic fields, and possible atmospheric data determined by the spacecraft's own radio signal.

This last experiment will also refine our knowledge of Mercury's mass and radius and may yield information about its shape and density.

The readings will begin just before Mariner's closest approach March 29—to within 1,000 kilometers (625 miles) of Mercury. At that time the innermost planet will be about 40 million miles from the Sun—four-tenths the mean distance of Earth's orbit.

Mariner 10, history's first dual-planet spacecraft, was launched last November 3 by NASA and flew by Venus February 5, producing a scientific bonanza. Dr. James A. Dunne, of Caltech's Jet Propulsion Laboratory, project scientist, expects a similar yield at Mercury.

"A few hours of observation will end centuries of speculation," Dr. Dunne says. Until now Mercury has been studied only by Earth telescopes; its surface, possible atmosphere and surrounding forces remain largely a mystery.

Solar wind plasma intensity will be closely studied by a team headed by Dr. Herbert S. Bridge, Massachusetts Institute of Technology. Other principal investigators include Dr. Norman F. Ness, Goddard Space Flight Center, Maryland, magnetic fields; Prof. John A. Simpson, University of Chicago, charged particles; and Prof. H. T. Howard, Stanford University, radio science and celestial mechanics. The experiments overlap and complement each other in ways that should produce a total

concept of the dynamics of Mercury's interaction with the solar environment.

The solar wind experiments, which revealed that Venus has a long plasma wake or tail on its antisolar side, will attempt to determine the general character of that interaction—whether it is Earth-like, Moon-like, Venus-like, or some new phenomenon altogether.

The nature of this interaction is determined by the basic properties of a planet—its magnetic fields, atmosphere and electrical conductivity. A scanning electron spectrometer and dual magnetometers on a 20-foot boom will measure the solar wind.

In addition to measuring the solar wind's magnetic fields, specific readings on Mercury's magnetic field, if any, will be measured by the magnetometers. These instruments are so sensitive they measure interplanetary magnetism from 2 to 25 gammas, compared with Earth's equatorial norm of 30,000 gammas.

However small the fields may be, the instruments will measure them. The magnetometers indicated that Venus' magnetism is less than one-twentieth of one per cent of Earth's magnetic field. Mercury's may be even less.

As Mercury rotates slowly, (once every 58.6 days), it is not expected that an iron core, if present, would create a dynamo effect believed to cause the Earth's magnetic field. While less than half the size of Earth, Mercury is believed to be unusually dense with a high iron content.

Mercury's radius has been calculated at 2,438 kilometers (1,500 miles) or .382 of Earth's. Its density is believed to be 5.5 times that of water, about equal to Earth's. While Mercury is only about 1½ times as large as the Moon, its mass is about five times as great.

Mariner's two radio frequencies (S-band and X-band) paid off handsomely at Venus. That planet is now known to be much rounder than Earth, with slightly

less mass than previously indicated, and with well-defined cloud layers highly absorbing to radio signals.

## NASA Announces Reorganization

(Continued From Page 1)

and Interagency Affairs.

Dr. William R. Lucas Deputy Director of MSFC, will become Center Director in early summer when Dr. Petrone expects to move to Washington on a full-time basis.

## JSC Visitor Program Has Several New Attractions

Several new attractions have been included in the Lyndon B. Johnson Space Center Visitor Program.

One new addition to the collection of spacecraft, flight articles and exhibits in the Visitor Orientation Center, Building 1, is "America"—the spacecraft that carried the Apollo 17 crew to the Moon.

Another new attraction is the Lunar Landing Training Vehicle, one of only two left in the world. Often called the "flying bedstead," this strange looking craft was used by all the Apollo crews to train for landing on the Moon.

The public may visit the Apollo Lunar Surface Experiment Package receiving station and observe live signals being received from the Moon. Samples of data sent from the Moon will be given to visitors upon request.

The LTA-8 (Lunar Module Test Article) is still available for viewing. This spacecraft is identical to the LM used to land the first men on the Moon.

One of NASA's newest and largest development facilities, and a focal point for this Nation's manned space flight program, JSC is open to visitors for self-guided walking tours 7 days a week from 9:00 a.m. to 4:00 p.m. except on Christmas Day. There is no admission charge and no need for advance reservations.



LUNAR MODULE/SKYLAB EXHIBITS DEDICATED—THE Lunar Module and Skylab instrument panel trainers used by flight controllers in familiarization training have been put on display in the lobby of Building 30. The exhibits were designed by Wanda Noah (top photo) of Kentron under the direction of Lyle White (shown with total exhibit.) Fabrication of the exhibits was by Tech Services personnel (bottom, left to right) Bill Shropshire, Eldon Pruitt, (Noah), Harold Siegfried, and Bruce Sprague. Hector Escobedo, Bob Steiger, Daniel Ramirez and Mitchell, not pictured, also assisted with fabrication of the exhibits.



Guided tours through JSC facilities not included on walking tours are available Monday through Friday at 9:15 a.m., 11:00 a.m., 1:00 p.m. and 2:30 p.m.

Recently added to the guided tour schedule is a close-up look at the 1-g skylab trainers and duplicates of the massive equipment that composes the Skylab space station currently in Earth orbit.

JSC also sponsors a special space-science program for elementary, junior and senior high school groups.

Lecture-demonstrations are given each Wednesday throughout the school year to acquaint students with space-science concepts, applications, major accomplishments, and future objectives of the agency. The pro-

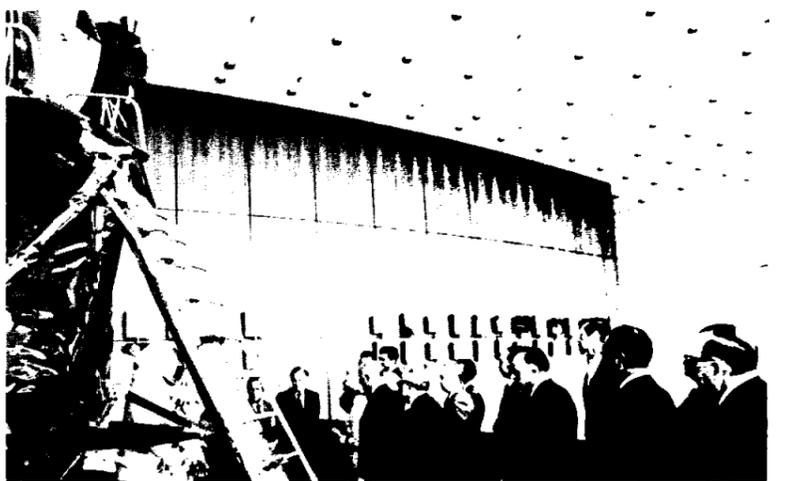
gram begins at 10:15 a.m. and lasts for about two hours.

Advance reservations are required for the lecture-demonstrations and the guided tours. Small groups and school should call 483-4321; large organized groups should call 483-4241.

Reservations also may be made by writing to the Special Events Office, AP5, NASA Johnson Space Center, Houston, Texas 77058.

JSC's Visitor Program began in 1964 when the Center opened to the public for a weekend. After that, the JSC Open House Program emerged and lasted until 1969 when the Center opened to the public on week days also.

Since 1970, JSC has attracted approximately one million visitors annually.



JSC VISITORS—Pictured above are tourists in the Visitor's Orientation Center in Building 1. To the left is the LTA-8 (Lunar Module Test Article).